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Materials and Aids for the Visually Impaired Diabetic

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Selected Annotations
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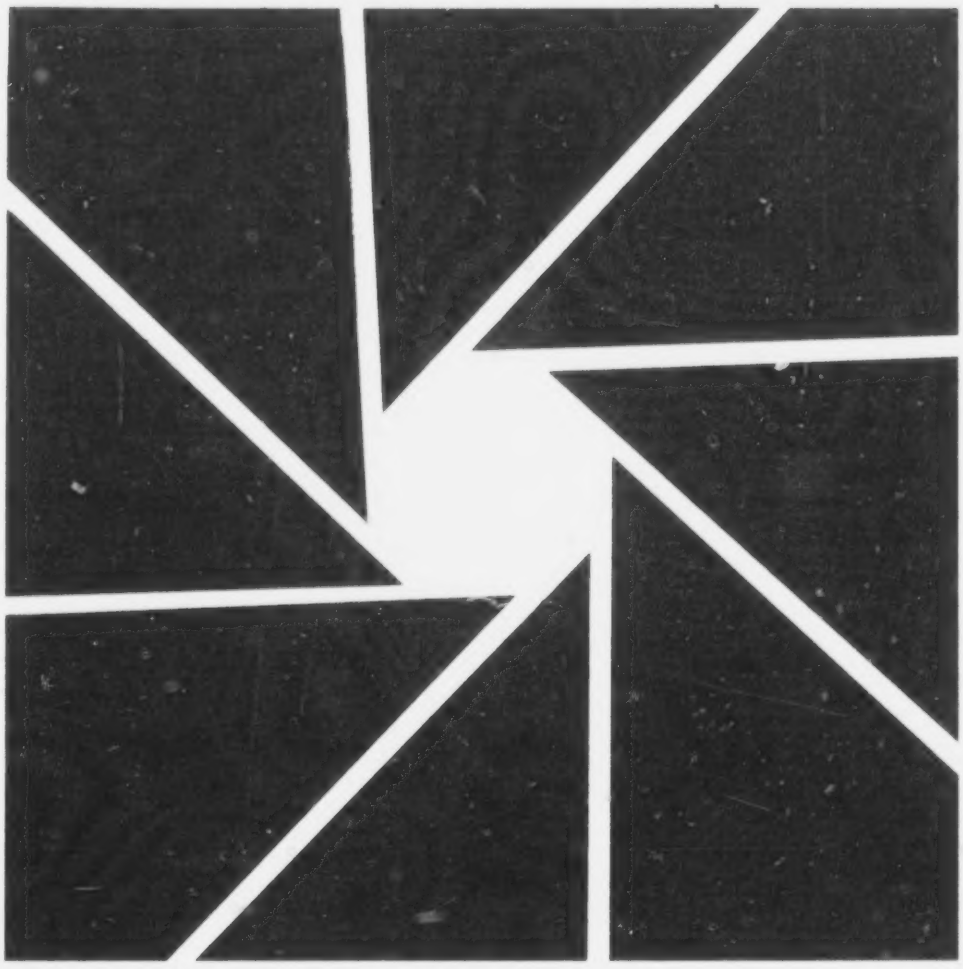

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
National Institutes of Health

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Materials and Aids for the Visually Impaired Diabetic

Selected Annotations

Prepared by the
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Public Health Service National Institutes of Health
National Institute of Arthritis, Metabolism, and Digestive Diseases

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MATERIALS AND AIDS FOR THE VISUALLY IMPAIRED DIABETIC

SELECTED ANNOTATIONS

PREFACE

This bibliography has been prepared by the staff of the National Diabetes Information Clearinghouse as a resource for people with diabetes, health care providers, and others needing information on diabetes-related visual impairment. It is organized in two sections: materials suitable for public and patient education and resources for health professionals. No attempt has been made to assess the educational value of the entries, and their inclusion does not imply endorsement by the National Institute of Arthritis, Metabolism, and Digestive Diseases. If an item has been evaluated by an organization, that information is included. This listing represents an overview of materials available on this subject; it is not intended to be exhaustive.

Since the Clearinghouse does not distribute materials, please contact the source indicated. The Clearinghouse welcomes your comments, inquiries, and additional materials.

NOTE: Users are free to reproduce this bibliography in any quantity. NDIC publications are not under copyright restrictions.

Explanatory Notes

1. Unsigned abstracts have been prepared by NDIC staff. The sources of other abstracts are indicated by the following abbreviations:

AA	Author abstract
AFB	Abstract from American Foundation for the Blind
AVLINE	Annotation reprinted from Audiovisuals Online, National Library of Medicine
MP	Abstract from Medcom Products
UM	Abstract from the University of Michigan, Furstenberg Student Study Center. Audiovisual Resources for Diabetes Education. Ann Arbor: The University, 1978.
-M	Abstract modified by Clearinghouse staff

2. The format for bibliographic citations generally follows National Library of Medicine bibliographic practices or those of American National Standard for Bibliographic References.

3. Abbreviations Used in Citations:

[anon.]:	Author unknown
b&w:	Black and white
comp:	Compiler
[n.d.]:	Date unknown
sd.	Sound

4. Large Print: type size 16 pt. or larger; recommended by the National Accreditation Council for Agencies Serving the Blind and Visually Impaired.

MATERIALS AND AIDS FOR THE VISUALLY IMPAIRED DIABETIC

SELECTED ANNOTATIONS

PUBLIC AND PATIENT RESOURCES

Print Materials

1. The Aging Eye: Facts on Eye Care for Older Persons. [anon.]. New York: National Society for the Prevention of Blindness; 1977. 12 p.

Changes in vision and in the eye itself that may accompany aging are described in this booklet. The cause and effects of diabetic retinopathy are discussed. Low-vision aids and first-aid tips for eye emergencies are listed.

Price: Free/1; $8.00/100. (Must send self-addressed, stamped envelope for free copy.)

Source: National Society to Prevent Blindness; 79 Madison Avenue; New York, NY 10016. (212) 634-3505.

2. Aids for the Diabetic with Impairment of Vision. Minneapolis: Diabetes Education Center; 1975. 4 p.

The Diabetes Education Center of Minneapolis has compiled a descriptive list of special devices that may benefit the diabetic with impaired vision. Objects include magnifying glasses, eyeglasses, syringe magnifiers, insulin needle guides, and insulin bottle guides. Ordering information is provided.

Price: $0.50.

Source: Diabetes Education Center; 4959 Excelsior Boulevard; Minneapolis, MN 55416. (612) 920-6742.

3. Aquatic Recreation for the Blind. H. C. Cordellos. Washington, DC: Information and Research Utilization Center; 1976. 126 p.

Discussion of aquatic activities that blind and partially sighted persons can participate in without increased risk to personal safety are included in this paperbound book. Topics include swimming,

diving, lifesaving, small craft safety, water skiing, scuba diving, and water games. The author speaks from a unique vantage point, because he is blind.

Price: $7.95.

Source: American Alliance for Health, Physical Education, Recreation and Dance; 1201 Sixteenth Street, N.W., Washington, DC 20036. (202) 833-5541.

4. Blindness and Diabetes. [anon.]. New York: American Foundation for the Blind; 1975. 16 p.

Helping the blind diabetic cope with his or her condition is the primary focus of this booklet. Physical and psychological complications are discussed. Developing an independent approach to the activities of daily living is emphasized.

Price: Free/1; $0.35 each/2-50 copies.

Source: American Foundation for the Blind, Inc.; 15 West 16th Street; New York, NY 10011. (212) 620-2000.

5. Diabetes and Eye Trouble. C. S. Littwin. Hackensack: New Jersey Affiliate; 1978. 4 p.

Eye problems encountered by the person with diabetes are discussed in this brochure, a transcript of one of 22 cassettes in a series entitled "Diabetes by Phone for Patients." Diabetic retinopathy is explained.

Price: $0.10.

Source: American Diabetes Association; New Jersey Affiliate, Inc.; 345 Union Street; Hackensack, NJ 07601. (201) 487-7228.

6. Diabetes as a Way of Life [Braille]. T. S. Danowski. New York: Coward, McCann & Geoghegan; 1974. 208 p.

In this braille volume, the author discusses the major aspects of diabetes including alternative philosophies of treatment and signs of satisfactory and unsatisfactory control. The appendix contains instructions for urine testing, descriptions of the action of various insulins, a roster of lay diabetes groups, and a discussion of the role of the pituitary, thyroid, and adrenal glands.

Price: Not for sale, but may be borrowed.

Source: Each Regional Library for the Blind and Physically Handicapped. See local phone book.

Source: Library of Congress; Division for the Blind and Physically Handicapped; 1291 Taylor Street, N.W.; Washington, DC 20542. (202) 882-5500.

7. Diabetes for Diabetics: A Practical Guide [Braille]. G. F. Schmitt. 4th ed. Miami: Diabetes Press of America; 1973. 242 p.

This systematic, graphic presentation of the fundamentals of diabetes includes discussions of diet, insulin, oral drugs, urine testing, and special problems such as diabetes in childhood, marriage, and pregnancy.

Price: $39.00.

Source: Iowa Commission for the Blind; Fourth and Keosauqua Way; Des Moines, IA 50309. (515) 283-2601.

8. The Diabetic at Work and Play [Braille]. B. R. Boshell. Springfield, IL: Charles C. Thomas; 1971. 195 p.

This four-volume braille edition contains information on oral drugs, diabetic camps, research, and other topics.

Price: $26.00.

Source: Iowa Commission for the Blind; Fourth and Keosauqua Way; Des Moines, IA 50309. (515) 283-2601.

9. Diabetic Retinopathy. [anon.]. Bethesda: National Institutes of Health; [n.d.]. 1 p.

Large-scale clinical studies on diabetic retinopathy supported by the National Eye Institute are briefly discussed.

Price: Free.

Source: National Institutes of Health; National Eye Institute; Information Office; Building 31, Room 6A25; Bethesda, MD 20205. (301) 496-5248.

10. Diabetic Retinopathy: A Major Cause of Blindness. [anon.]. Chicago: Illinois Society for the Prevention of Blindness; [n.d.]. 8 p.

A general description of diabetic retinopathy is followed by a discussion of its causes and warning symptoms. Treatment and control are also considered.

Price: Free.

Source: Chicago: Illinois Society for the Prevention of Blindness; 53 West Jackson Boulevard, Room 1435; Chicago, IL 60604. (312) 922-8710. American Diabetes Association, Greater Chicago and Northern Illinois Affiliate, Inc.; 6 North Michigan Avenue; Chicago, IL 60602. (312) 943-8668.

11. The Diabetic Retinopathy Study: An Evaluation of Photocoagulation Treatment. [anon.]. Bethesda: National Institutes of Health; [n.d.]. 4 p.

Evidence of the effects of photocoagulation, derived from cumulative analysis of data collected for more than two years in the Diabetic Retinopathy Study (DRS), is reported in this fact sheet from the National Eye Institute. Medical centers participating in the projected 10-year study are also listed.

Price: Free.

Source: National Institutes of Health; National Eye Institute; Information Office; Building 31, Room 6A25; Bethesda, MD 20205. (301) 496-5248.

12. Diabetic Retinopathy Vitrectomy Study. [anon.]. Bethesda: National Institutes of Health; 1976. 4 p.

Goals, design features, and eligibility requirements of the Diabetic Retinopathy Vitrectomy Study (DRVS) and a listing of participating clinical centers and physicians are presented.

Price: Free.

Source: National Institutes of Health; National Eye Institute; Information Office; Building 31, Room 6A25; Bethesda, MD 20205. (301) 496-5248.

13. The Diabetic's Insight About the Eye. [anon.]. Cleveland: Diabetes Association of Greater Cleveland; [n.d.]. 4 p.

This large-print, illustrated leaflet emphasizes the need for an awareness of possible eye problems and lists warning symptoms that require medical attention.

Price: Free.

Source: Diabetes Association of Greater Cleveland; 2022 Lee Road; Cleveland, OH 44118. (216) 371-3301.

14. Enjoying Food on a Diabetic Diet [Braille]. E. M. Meyer. New York: Doubleday; 1971. 227 p.

The four-volume braille edition contains food and diet information useful to noninsulin-dependent diabetics, persons with heart trouble, and persons with a weight problem. Recipes are included.

Price: $26.00.

Source: Iowa Commission for the Blind; Fourth and Keosauqua Way; Des Moines, IA 50309. (515) 283-2601.

15. An Evaluation of Devices for Insulin-Dependent Visually Handicapped Diabetics. K. Hynes; M. Galligan; L. Saffioti. New York: New York Association for the Blind; [n.d.]. 4 p.

Information provided in this illustrated fact sheet on devices for the visually handicapped diabetic includes (1) type; (2) design/construction; (3) size/volume availability; (4) unit calibration; (5) evaluation of device; (6) replacement parts; (7) cost; (8) vendor; and (9) catalog order number.

Price: $0.35.

Source: The New York Association for the Blind; 111 East 59th Street; New York, NY 10022. (212) 355-2200.

16. Exchange List for Meal Planning [Braille]. [anon.]. Des Moines: Iowa Commission for the Blind; [n.d.]. 11 p.

The exchange lists are available in thermoform copy for the visually impaired diabetic.

Price: $6.50.

Source: Iowa Commission for the Blind; John Taylor, Director; Fourth and Keosauqua; Des Moines, IA 50309. (515) 283-2601.

17. Exchange Lists for Meal Planning. [anon]. New York, Chicago: American Diabetes Association, American Dietetic Association; 1976. 24 p.

Information about each exchange group, the number of grams of carbohydrates, proteins, and fats for that group, and lists of substitutions are provided in this colorfully illustrated booklet. A meal plan chart and a glossary of terms are also included.

Price: $7.50 (Large print).

Source: American Diabetes Association, Iowa Affiliate; 5270 North Park Place, N.E.; Cedar Rapids, IA 52402. (319) 377-4615.

Price: $5.00 (Braille).

Source: Volunteer Braille Services, Inc.; P.O. Box 1592; Houma, LA 70361. (504) 872-9658.

18. Exchange Lists for Meal Planning [Braille]. American Diabetes Association, American Dietetic Association. New York: New York Diabetes Association; [n.d.]. 6 p.

Exchange lists for diabetic meal planning are provided in braille.

Price: Free; however, must be picked up in person.

Source: American Diabetes Association, New York Affiliate; 104 East 40th Street; New York, NY 10016. (212) 697-7760.

19. For the Diabetic: Caring for Your Feet. [anon.]. New York: New York Diabetes Association; 1977. 10 p.

Available in large print, the fact sheet lists several general rules for avoiding foot trouble and emphasizes the need to report problems to a physician or podiatrist immediately.

Price: Free/1; $8.00/100.

Source: American Diabetes Association, New York Affiliate, Inc.; 104 East 40th Street; New York, NY 10016. (212) 697-7760.

20. Helping Your Diabetic Child: A Guide to Parents and Their Children Who Have Diabetes [Braille]. J. M. Court. New York: Taplinger; 1975. 223 p.

Written for parents of children who have developed diabetes and for older diabetic children, this book provides a detailed description of the disorder and discusses diet, insulin, injections, urine tests, insulin reactions, and information to give to the school teacher. Questions commonly asked by diabetic children and their parents and the daily management of diabetes are also discussed. Appendices are included on diets, emergency foods, summer camps, and medical terms.

Price: $26.00.

Source: Iowa Commission for the Blind; Fourth and Keosauqua Way; Des Moines, IA 50309. (515) 283-2601.

21. Know Your Eyes. [anon.]. Bethesda: National Eye Institute; [n.d.]. 2 p.

This brief glossary includes terms on parts of the eye, mechanics of sight, eye disorders, and equipment and techniques.

Price: Free.

Source: National Institutes of Health; National Eye Institute; Information Office; Building 31, Room 6A25; Bethesda, MD 20205. (301) 496-5248.

22. Look 'N Cook. I. Erickson. Willmar: Maracom/Color Press; 1974. 240 p.

Scandinavian recipes are featured in this spiral-bound cookbook. Designed for the visually handicapped, the large print collection includes a chapter of recipes for diabetics. The number of exchanges per serving is provided for each recipe in this section.

Price: $6.95 plus $0.85 postage.

Source: Look 'N Cook; Box 20; Willmar, MN 56201. (612) 235-3300.

23. Mega-Diastix: For the Visually-Impaired Diabetic. Elkhart: Ames; 1977. 1 p.

The poster-size fact sheet offers information about urine testing with Mega-Diastix for the visually impaired diabetic, including: (1) description; (2) control tablets; (3) using the control tablets;

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(4) how to get good results; and (5) interpretation of test results. Illustrated directions are given for urine testing and use of the glucose control tablets.

Price: Free.

Source: Ames Company; Division of Miles Laboratories, Inc.; P.O. Box 70; Elkhart, IN 46514. (219) 264-8636.

24. New Research in Diabetic Retinopathy. [anon.]. Research Resources Reporter. 3(11):5-7; November 1979.

The use of photocoagulation in the treatment of diabetic retinopathy is discussed.

25. One Diabetic's Story. [anon.]. The Healing Arts. 6(3):4-6; 1976.

The biography of a blind diabetic who works as a rehabilitation therapist is presented.

26. [Patient Education Items]. L. Fuhrer, comp. Chicago: Northern Illinois Affiliate; 1978. 21 p.

This list of items useful in diabetes education, compiled by the Northern Illinois ADA Affiliate, includes visual aids, instructional materials, audiovisual materials, periodicals, identification materials, emergency aids, nutrition information, and materials in Spanish.

Price: Free.

Source: American Diabetes Association, Northern Illinois Affiliate, Inc.; 6 North Michigan Avenue; Chicago, IL 60602. (312) 943-8668.

27. Physical Education and Recreation for the Visually Handicapped. C. E. Buell. Washington, DC: American Alliance for Health, Physical Education, Recreation, and Dance; 1973. 67 p.

The paperbound book provides information about visual impairments, practical suggestions for activities in physical education and recreation programs (with minimum modification for various age groups), and an extensive bibliography. A section on activities for the visually handicapped child is included.

Price: $3.75.

Source: American Alliance for Health, Physical Education, Recreation, and Dance; 1201 16th Street, N.W.; Washington, DC 20036. (202) 833-5541.

28. SSI for Disabled or Blind Children. [anon.]. Washington, DC: Social Security Administration; 1979. 2 p.

The classification of children's disabilities, Supplemental Security Income, and other types of assistance are discussed in the brochure.

Price: Free.

Source: Superintendent of Documents; Government Printing Office; Washington, DC 20402. (202) 783-3238.

29. Your Eyes . . . For a Lifetime of Sight. [anon.]. New York: National Society for the Prevention of Blindness; 1978. 10 p.

The function of the eye is explained. Corrective eye care and safety for diabetic retinopathy are outlined.

Price: Free/1; $8.00/100.

Source: National Society for the Prevention of Blindness, Inc.; 79 Madison Avenue; New York, NY 10016. (212) 684-3505.

Nonprint Materials

30. AFB Insulin Guide.

This custom-made tool helps guide the needle into the center of the rubber stopper of the insulin bottle. It consists of an aluminum trough with a "V"-shaped notch at one end. In use, the "V" end of the trough is sterilized and the insulin vial placed at the opposite end with its stopper towards the "V." The syringe needle is then laid in the "V" and the vial pushed toward it, allowing the needle to penetrate the rubber stopper. Because vial sizes vary, an empty one must accompany the order so that the guide may be made to fit. Weight: 10 oz. (AFB-M)

Price: $6.50.

Source: American Foundation for the Blind; 15 West 16th Street; New York, NY 10011. (212) 620-2000.

31. "C-Better" Syringe Magnifier.

The snap-on magnifier can be used to facilitate administering medicine by syringe where calibrations are difficult to read. Magnifying 2X without distortion, it is made of clear plastic and can be boiled in water, soaked in alcohol, or washed in soap and water. It does not come into contact with the needle. Snap-on wires can be bent to fit different-sized syringe barrels.

Price: $3.00 postpaid; $2.40 each/12 or more.

Source: Tri-Country Rehabilitation Center, Inc.; 4461 S.E. Federal Highway; P.O. Box 597; Stuart, FL 33494. (305) 287-7600.

32. Char-Mag Syringe Magnifier.

The snap-on magnifier assists the low-vision diabetic in reading the calibrations on an insulin syringe.

Price: $4.00 each/1-5; Write for complete information on bulk rates.

Source: Char-mag Company of Glendale, Inc; 6026 North Apple Blossom Lane; Milwaukee, WI 53217. (414) 962-6059.

33. Click/Count Syringe.

Designed specifically for blind or partially sighted diabetics, the insulin syringe has settings for two methods of operation: (1) the measurement setting for measuring fluids into the syringe (each movement of one mark will result in an audible click); and (2) the free travel setting for ejecting from the syringe. Instructions for use accompany the aid.

Price: $15.00.

Source: Hypoguard Limited; 49 Grimston Lane; Trimley, Ipswich, Suffolk, England 1P10 0SA. Felixstowe 75689.

34. Copper Sleeve Syringe Gauge.

Progenitor of many syringe-loading gauges, the device consists of a segment of copper tubing cut lengthwise to fit around the plunger of an individual syringe. The length of sleeve corresponds to the exact measurement of a specific insulin dose. This device is neither interchangeable among different syringes nor can it measure a mixed dosage or vary the dose. It can be used only with a glass syringe or a B-D disposable syringe with an attached needle. (AFB-M)

Price: $2.00.

Source: Minneapolis Society for the Blind; 1936 Lyndale Avenue South; Minneapolis, MN 55403. (612) 871-2222.

35. Devices for Visually Impaired Diabetics. A. H. Townsend. New York: New York Affiliate; [n.d.]. 8 p.

A description of devices to assist the visually impaired diabetic is given with source and price information. Aids include syringes, syringe gauges or filling devices, bottle and needle guides, a snap-on magnifier, and emergency identification.

Price: Free.

Source: American Diabetes Association, New York Affiliate; 104 East 40th Street; New York, NY 10016. (212) 697-7760.

36. Diabetes and the Eye [Videorecording]. Chicago: University of Illinois; 1976. 1 cassette; 29 min.; sd.; color; 3/4 in. (Consultation --Internal Medicine).

The effects of diabetes on the blood vessels of the eye are discussed. Diabetes is a major cause of blindness, cataracts, and refractive errors

Symptoms of diabetes in the eye, examination methods, and treatment to contain the disease are included in the program coverage. (UM)

Price: Loan: $10.00/5 days prepaid.

Source: Abbott Laboratories; Attention: Ruth Price; Abbott Park, Dept. 383; North Chicago, IL 60064. (312) 937-6100.

37. Diabetes Explained: A Layman's Guide [Sound recording]. I. Laufer, H. Kadison. New York: Saturday Review Press; 1976. 2 sides; 6 hrs.

This recording presents a detailed look at the history and nature of diabetes. Special foci include insulin, diet, symptoms of diabetes, and, particularly, progress in diabetes research.

Price: Not for sale, but may be borrowed. Order No.: RC 10416.

Source: Each Regional Library for the Blind and Physically Handicapped. See local phone book.

Source: Library of Congress; Division for the Blind and Physically Handicapped; 1291 Taylor Street, N.W.; Washington, DC 20542. (202) 882-5500.

38. The Diabetes Question and Answer Book [Sound recording]. J. Biermann. Nashville: Sherbourne Press; 1974. 205 p. 4 cassettes. Approximately 6 hrs.

Basic questions of interest to the person with diabetes are discussed. The possibility of having a full, active, and independent life-style is emphasized.

Price: $8.00.

Source: Iowa Commission for the Blind; Fourth and Keosauqua Way; Des Moines, IA 50309. (515) 283-2601.

39. The Diabetic Gourmet [Sound recording]. A. J. Bowen. New York: Harper and Row; 1970. 10 sides; 8 hrs.

Recipes oriented toward family meal plans and suggestions for the use of exchange lists are provided. Weights are included for those requiring strict control, and carbohydrate, protein, and fat contents for individual ingredients are given. Recipes and meal plans which utilize unsaturated fats are emphasized. A list of ADA affiliates is included.

Price: Not for sale, but may be borrowed. Order No.: TB 3733.

Source: Each Regional Library for the Blind and Physically Handicapped. See local phone book.

Source: Library of Congress; Division for the Blind and Physically Handicapped; 1291 Taylor Street, N.W.; Washington, DC 20542. (202) 882-5500.

40. Diabetic Retinopathy. R. L. Bergen. Hackensack: New Jersey Affiliate; 1978. 4 p.

The types of diabetic retinopathy and possible treatment for this complication are explained in this brochure, a transcript of one cassette in a series entitled "Diabetes Tapes by Phone for Patients."

Price: $0.10.

Source: American Diabetes Association, New Jersey Affiliate, Inc.; 345 Union Street; Hackensack, NJ 07601. (201) 487-7228.

41. Dos-Aid Syringe Filling Device.

This adjustable volume regulator positions the syringe plunger so that the length of the column of insulin that can be drawn into the syringe is predetermined, thereby governing the number of units of insulin. It is plastic and for use mainly with disposable U-100 syringes such as B-D Plastipak long (5/8" needle) or Jelco long. It will not accommodate B-D Lo-Dose 0.5 cc disposable insulin syringe and is considered unsuitable for Monoject 501.

In use, the disposable syringe is placed in a horizontal slot in the center of the device and the plunger pulled back as far as the plunger stop permits. The insulin vial is then positioned at the opposite end of the device and pushed toward the syringe. As the vial approaches the syringe, the needle penetrates the rubber stopper so that the syringe can be filled in the usual manner. After filling, the syringe and vial are removed and injection proceeds as prescribed by the physician, who initially sets the device for proper dosage and syringe width and locks settings firmly in place. Once set for a particular brand of syringe, the device should be used thereafter only with an identical brand/type of syringe. (AFB-M)

Price: $9.95.

Source: American Foundation for the Blind; 15 West 16th Street; New York, NY 10011. (212) 620-2000.

42. Exchange Lists for Meal Planning [Sound recording]. New York, Chicago: American Diabetes Association, American Dietetic Association; [n.d.]. 2 hrs.

Information about each exchange group (including the number of grams of carbohydrates, proteins, and fats for each group) and lists of substitutions are provided. A meal plan and glossary of terms are also included.

Price: $5.00.

Source: Volunteer Braille Services, Inc.; P.O. Box 1592; Houma, LA 70361. (504) 872-9658.

43. HoldEase.

This plastic device is designed to hold both the insulin vial and the syringe. The insulin vial clips into one end of the guide and the syringe clips into the other. The guide can then be compressed, allowing insertion of the needle into the vial without the risk of contamination.

Price: $9.75.

Source: Meditec, Inc.; 9485 East Orchard Drive; Englewood, CO 80111. (303) 771-4863.

44. Inject-Aid.

This self-help device assists the diabetic in obtaining accurate, consistent measurement while filling insulin syringes. It is six inches long and made of high-impact plastic that provides support between the vial and syringe. Inject-Aid will accommodate long, medium, and short insulin syringes.

Price: $4.95 postpaid.

Source: George Wright Industries; 82 West Lake Shore Drive; Lincoln, NE 68528. (402) 477-1382.

45. Insulgage.

The Insulgage loading gauge enables the diabetic to load the insulin syringe safely and accurately as well as to vary the doses and measure of mixed doses. This precalibrated volume regulator is available in a large range of dosage sizes, which are marked in large print, braille, or raised numbers.

Price: $2.25 (inkprint); $2.75 (braille); $3.50 (raised numbers); $4.00 (raised numbers and braille), plus $3.00 for each order.

Source: Meditec, Inc.; 9485 East Orchard Drive; Englewood, CO 80111. (303) 771-4863.

46. Insulin-Aid.

Insulin-Aid assists the diabetic in preparing and using insulin. The aid is made of clear plexiglass with a magnetic back which can be attached to any metallic surface to hold the insulin vial in place. It can also be used to protect and store insulin at work or while traveling.

Price: $8.98.

Source: Seabee Corporation; Insulin-Aid Division; P.O. Box 457; 602 South Federal Street; Hampton, IA 50441. (515) 456-4871.

47. Insulin Dosage Monitor.

The elongated plastic strip, pre-cut by the physician at the point on the scale that corresponds to the desired insulin dosage, is for use with B-D #8409 Plastipak U-100 syringes only and is not for mixed doses. The monitor should be changed every three to four months or if the dosage of insulin is adjusted.

Price: $25.00/10.

Source: Andros, Inc.; 2332 Fourth Street; Berkeley, CA 94710. (415) 849-1377.

48. Insulin Needle Guide.

The guide fits over the top of Eli Lilly insulin bottles. Constructed of lightweight aluminum, it has a concave, funnel-shaped opening that guides the syringe needle directly into the rubber stopper. It can be used with Insulin Vial Guide. (AFB-M)

Price: $1.95.

Source: American Foundation for the Blind; 15 West 16th Street; New York, NY 10011. (212) 620-2000.

49. Insulin Syringe.

For use with U-100 insulin, this standard short 1 cc glass syringe is fitted with a metal Tru-Set control that must be set by a physician or registered nurse to permit insulin measurement without sight. The control helps ensure that the prescribed dose of insulin will be drawn into the syringe and tends to simplify preparation for injection.

Price: $9.00.

Source: Eisele and Company, Inc.; Nashville, TN 37210. (No phone number available.)

50. Insulin Vial Guide.

With this aid, the syringe needle can be guided directly into the rubber stopper of the insulin bottle. Made of white enameled wood, it has an extended arm against which the vial is positioned plus a groove for placement of the syringe.

Price: $2.00.

Source: American Foundation for the Blind; 15 West 16th Street; New York, NY 10011. (212) 620-2000.

51. Medi-jector.

The injection aid is used for administration of insulin without a needle. Dosage can be easily set and locked into position. A prescription from a physician is needed to purchase the Medi-Jector, which weighs 22 ounces and is seven inches long. It must be sterilized once a month. A one-year warranty comes with the aid.

Price: $695.00.

Source: Derata Corporation; 4205 Winfield Scott Plaza, Suite 1; Scottsdale, AZ 85251. (602) 994-8743.

52. The Peripatetic Diabetic [Sound recording]. J. Bierman, B. Toohey. New York: Hawthorn; 1969. 16 sides; 12 hrs.

Part I of the recording discusses eating out, traveling, urine testing, and other everyday issues. Part Two, the Diabetic Cook Book, provides recipes and helpful hints. In Part Three, the food exchange lists are explained, and information is given on alcoholic beverages, diabetic coma, and insulin reaction. Useful phrases in foreign languages are also included.

Price: Not for sale, but may be borrowed. Order No.: TB 3670.

Source: Each Regional Library for the Blind and Physically Handicapped. See local phone book.

Source: Library of Congress; Division for the Blind and Physically Handicapped; 1291 Taylor Street, N.W.; Washington, DC 20542. (202) 882-5500.

53. Scale Magnifier.

All brands of 1 cc and 1/2 cc syringes can be snapped onto this magnifier. The device optically doubles the size of scale markings equally in all directions without distortion.

Price: $1.98/suggested retail price. Available at local drug stores.

Source: Manufacturer: Monoject; Division of Sherwood Medical; Dept. T.I.; 1831 Olive Street; St. Louis, MO 63103. (314) 621-7788.

54. Syringe Magnifier.

The syringe magnifier facilitates the accurate dosage measurement of insulin for the visually handicapped diabetic.

Price: $4.00; $33.00/12.

Source: Cemco; P.O. Box 21; Scandia, MN 55073. (612) 464-3181.

PROFESSIONAL RESOURCES

Print Materials

55. Accurate Measuring of Daily Insulin Doses: Aids for the Blind Diabetic. M. S. Kappy. Arizona Medicine. 35(3):188-90; March 1978.

Devices which give the blind diabetic greater independence are discussed.

56. An Audio Urine-Glucose Analyzer for Blind Diabetics. J. May; S. Inman; D. E. Wilcox; R. S. Beckett. Diabetes. 26(3):192-5; March 1977.

A urine-glucose analyzer designed and constructed for a blind young man enabled him to test his urine and, thereby, to determine and self-administer does of insulin. The instrument and its use are described, and the results of about 20 months' experience with it are summarized. (AA-M)

57. Basement Membrane Thickness, Insulin Antibodies and HLA-Antigens in Long Standing Insulin Dependent Diabetics With and Without Severe Retinopathy. T. Deckert; J. Egeberg; C. Frimodt-Miller et al. Diabetologia. 17(2):91-6; August 1979.

The study was designed to show whether there was any relation between muscle capillary basement membrane thickness, HLA-antigens, anti-insulin antibodies, and proliferative retinopathy. Electron microscopic measurements of muscle capillary basement membrane thickness were performed on muscle biopsies from 15 insulin-dependent diabetics with severe proliferative retinopathy, 24 insulin-dependent diabetics with minimal retinopathy, and 18 age- and sex-matched nondiabetics. All the patients had had diabetes for 20 years or more. None had biochemical or clinical evidence of diabetic nephropathy. Basement membrane thickness was measured according to the methods of Siperstein and Williamson. Muscle capillary basement membrane thickening occurred in 32 of 39 diabetics, using the Siperstein method, but patients with proliferative retinopathy did not exhibit thicker basement membranes than patients with no or minimal changes in the retina. There were apparent differences in HLA-antigens between diabetics with and without proliferative retinopathy, but they did not reach statistical significance. There was no correlation between muscle capillary basement membrane thickness and the quantity of insulin antibodies. The results indicate that factors other than basement membrane thickening and genetic factors in the HLA region are responsible for the development of proliferative retinopathy. (AA)

58. The Blind Diabetic in the Rehabilitation Center: Administrative Framework. L. L. Reid. Journal of Visual Impairment and Blindness. 72(9):364-5; November 1978.

Emphasizing that blind diabetics deserve all the benefits of training, the author contends that the administrative framework for working with blind diabetics in the rehabilitation center is not very different from that required for other client populations. A flexible administrative structure and a team approach toward services are advocated. The administrator's function is seen as deriving maximum benefit from the talents of professional staff. (AA-M)

59. Blindness and Diabetes from a Psychologist's Perspective. S. Barron. Journal of Visual Impairment. 72(9):354-7; November 1978.

Juvenile and adult diabetics, because of the pressures of dealing with their illness and the ways others treat them, develop certain common traits and characteristics. These characteristics are described, along with their implications for rehabilitation and suggestions for working with the blind diabetic client and his/her family. (AA-M)

60. Blindness from Metabolic Cataract--A Presenting Manifestation of Diabetes Mellitus. A. C. Asmal; T. J. Winning; W. P. Leary; B. Dayal. South African Medical Journal. 52(7):269-70; 6 August 1977.

Metabolic cataracts in diabetic patients usually develop within the first three years of the disease and, while causing little or no initial visual disability, may progress to blindness. Findings are reported in three patients with previously normal vision who presented virtual blindness from cataract formation at the time diabetes was detected. (AA-M)

61. Chloropropamide Alcohol Flushing and Diabetic Retinopathy. R. D. Lester; A. H. Barnett; D. A. Pyke. Lancet. 1(8124):997-9; 12 May 1979.

"Mason-type" diabetics (mild diabetes which is dominantly inherited) are relatively free of retinopathy. Alcohol almost invariably causes facial flushing in these patients when they are given chlorpropamide (chlorpropamide alcohol flush, C.P.A.F.). Two hundred ninety-one non-insulin dependent diabetics were examined to see whether there was a difference in frequency of retinopathy betweeen C.P.A.F. positive and negative cases who were of comparable age and duration of diabetes. Retinopathy was commoner and often severe in C.P.A.F. negative patients. Blindness from retinopathy was almost confined to C.P.A.F. negative cases. Lens opacities, on the other hand, were equally common in both groups. Since C.P.A.F. is an inherited trait, retinopathy in non-insulin dependent diabetics is to a considerable extent, although not entirely, determined by genetic factors. (AA)

62. Coping with Diabetic Retinopathy. J. Oehler-Giarrantana. Sundial. 3(4):4-5; December 1977.

A blind psychiatric nurse describes her personal and professional insights into the special problems of the visually impaired diabetic.

63. Detection of Early Retinal Changes in Diabetes by Vitreous Fluorophotometry. J. G. Cunha-Vaz; J. R. Fonseca; J. F. Abreu; et al. Diabetes. 28(1):16-9; January 1978.

A series of 77 patients with overt diabetes and with apparently normal fundi on ophthalmoscopy and fluorescein angiography was examined by vitreous fluorophotometry. Breakdown of the blood-retinal barrier, which appears to be the earliest clinically detectable change in the retina in diabetes, was a constant finding. Quantitative measurement by vitreous fluorophotometry of the breakdown of the blood-retinal barrier could be correlated with degree of metabolic control and previous duration of diabetic disease. Significantly higher vitreous fluorophotometry values, indicating a more marked breakdown of the blood-retinal barrier, were recorded in patients under poor metabolic control than in patients whose diabetes was under relatively better control. Similarly, patients who have had diabetes for longer periods of time showed higher vitreous fluorophotometry values than those recorded in patients with diabetes of shorter duration. (AA)

64. Diabetes and the Eye: Recognizing Problems Early. M. G. Grand; L. A. Lobes. Modern Medicine. 47(3):66-79; February 1979.

Ocular complications associated with diabetes mellitus include dysfunction in refraction and accommodation, ophthalmoplegia, cataracts, glaucoma, and retinopathy. Clinical manifestations of these disorders are discussed, as well as tips on examination, management, and referral. Since diabetic retinopathy, the second leading cause of new blindness in the United States, presents the greatest risk to a patient's vision, close followup by the family physician is warranted. Yearly examinations for the first 10 years in patients with juvenile-onset diabetes are recommended along with six-month checkups thereafter in these individuals and all others with maturity-onset disease. (AA-M)

65. Diabetic Retinopathy. P. F. Palmberg. Diabetes. 26(7):703-11; July 1977.

The risk to diabetic persons of visual impairment or blindness from diabetic retinopathy is discussed in this review. The clinical stages and natural history of diabetic retinopathy are described: (1) the breakdown of the blood-retinal barrier, (2) the nonproliferative (or background) stage, and (3) the proliferative stage (with the formation of new vessels and fibrous tissue). Theories of its

pathogenesis are reviewed; hematologic abnormalities, immunologic factors, and nonpancreatic hormonal influences are among the mechanisms discussed. The treatment modes of photocoagulation, pituitary ablation, and vitrectomy are explained.

66. Diabetic Retinopathy and Pregnancy. J. Cassar; E. M. Kohner; A. M. Hamilton; et al. Diabetologia. 15(2):105-11; August 1978.

Diabetic retinopathy was found to be present in 12 out of a group of 67 diabetic patients supervised by us during 92 pregnancies, and three further pregnant diabetics were referred to us because of retinopathy. The mean duration of diabetes was 13 years (range 3-25 years). Nine patients had minimal retinopathy, two had background retinopathy, and the remaining four proliferative retinopathy. The cases with minimal retinopathy showed no progression during pregnancy. In one patient with background retinopathy there was deterioration. Of the four patients with proliferative retinopathy one showed regression during the pregnancy, two showed advance and were treated with photocoagulation (these two patients now have normal vision), while the patient with exensive retinitis proliferans, with retinal detachment in both eyes and previous photocoagulation, remained unchanged. The prognosis during pregnancy for patients with diabetic retinopathy is reasonable and has been improved by the advent of photocoagulation. (AA)

67. Diabetic Retinopathy: Nature and Extent. W. R. Coughlin; A. Patz. Journal of Visual Impairment and Blindness. 72(9):343-7; November 1978.

The authors discuss the incidence and prevalence of proliferative diabetic retinopathy in juvenile and maturity-onset diabetics. Theories of etiology and current modalities of treatment are also considered. (AA-M)

68. Diabetic Retinopathy Therapy. J. E. Harris. Sight Saving Review. 40(3):123-4; Fall 1970.

Pituitary ablation and photocoagulation are discussed as the modes of therapy most frequently employed for diabetic retinopathy.

69. Educating the Blind Diabetic About His Condition. J. J. Acton. Journal of Visual Impairment and Blindness. 72(9):366-7; November 1978.

Staffs of rehabilitation centers may assume that adult-onset blind diabetics, having had diabetes for a number of years, will possess adequate understanding of their condition. The author's experience shows that this is not usually the case. Methods for educating the blind diabetic are suggested. (AA-M)

70. Encouragement Breeds Independence in the Blind Diabetic. J. M. Schultz; M. Williams. Nursing. 76:19-20; December 1976.

In keeping with the philosophy that self-management of diabetes by blind patients need not be dangerous, several devices available to help blind diabetics with insulin injections are described. These include: (1) Hill Accurate Dosage Syringe, (2) the Copper Sleeve, and (3) the Insulgage Loading Gauge.

71. Evaluation of the Treatment of Diabetic Retinopathy: A Research Project. C. Kupfer. The Sight Saving Review. 43(1):17-28; Spring 1973.

A nationwide study to evaluate the methods (primarily photocoagulation) of treating proliferative diabetic retinopathy is described. The causes of diabetic retinopathy are illustrated and discussed. Five objectives of a clinical study are outlined.

72. Guidelines for Future Service to Blind Diabetics: Special Program Features. M. Williams. Journal of Visual Impairment and Blindness. 72(9):379-82; November 1978.

Focusing on the blind diabetic in rehabilitation center programs and on diabetes education for staff and clients, the author discusses program adaptations and modifications for blind diabetics. Staff attitudes toward working with diabetic clients are also discussed. (AA)

73. HLA Phenotypes and Diabetic Retinopathy. E. Moller; B. Persson; G. Sterky. Diabetologia. 14(3):155-8; March 1978.

The incidence of HLA antigens B8, BW15, DW3 and DW4 was found to be significantly increased in 99 patients with growth onset, insulin-dependent diabetes of more than 15 years duration. Different degrees of retinopathy were seen in 75% of the patients. No significant correlation between the presence of specific HLA alleles and the stage of retinopathy was found. We have discussed the possibility that all patients who develop diabetes have identical disease-predisposing genes, irrespective of their HLA alleles. If this was the case, the HLA phenotype would not determine the risk of developing diabetic retinopathy. (AA)

74. Hypomagnesemia, a Risk Factor in Diabetic Retinopathy. P. McNair; C. Christiansen; S. Madsbad; E. Lauritzen; et al. Diabetes. 27(11) 1075-7; November 1978.

The serum magnesium concentration was measured in 71 insulin-treated diabetic out-patients who had had the disease for 10 to 20 years.

The patients were divided into two subgroups according to the severity of their retinopathy. As a whole the patients exhibited a definite hypomagnesemia (P less than 0.001) that was most pronounced in the subgroup having the severest degree of retinopathy (P less than 0.01). The subgroups were comparable regarding known risk factors implicated in diabetic retinopathy. Thus, hypomagnesemia appears to be an additional risk factor in the development and progress of this complication. (AA)

75. Individualized Planning and the Team Approach in the Rehabilitation of the Blind Diabetic. A. Pais. Journal of Visual Impairment and Blindness. 72(9):372-78; November 1978.

The article discusses rehabilitation of the blind diabetic in a residential rehabilitation center which emphasizes a team approach. Staff members from all departments plan individual training programs for each blind diabetic client. (AA-M)

76. Injection Aids for Blind Diabetic Patients. V. A. Boyles. American Journal of Nursing. 77(9):1456-8; September 1977.

Guidelines for choosing the insulin injection device best suited to the blind diabetic's particular needs are presented. Possible case situations are discussed.

77. Meeting the Psychosocial and Rehabilitative Needs of the Visually Impaired Diabetic. J. Oehler-Garrantana. Journal of Visual Impairment and Blindness. 72(9):358-61; November 1978.

The psychosocial and visual problems of proliferating diabetic retinopathy are discussed in terms of four stages: discovery of the diagnosis, developing awareness of the diagnosis, realization of disability, and stabilization of vision. The need for new service organization models employing preventive rehabilitation is also discussed. (AA-M)

78. Multiple Daily Insulin Injections in the Treatment of Diabetic Retinopathy. The Job Study Revisited. T. Ashikaga; G. Borodic; E. A. Sima. Diabetes. 27(5):592-6; May 1978.

Data based on the prospective study of Job et al. are reanalyzed while initial number of microaneurysms and duration of patient follow-up are controlled. The reported statistical difference in the rate of microaneurysm increase between the single- and the multiple-daily-injection groups may be due to a difference in a subgroup who had a larger number of microaneurysms initially and who were studied for a

shorter period of time. No uniform difference was observed in the results of their treatment between the groups given a single injection and those given multiple injections. While this does not invalidate the conclusions of the study, it does point out the need for greater control in conducting future studies. (AA)

79. The Natural History of Diabetic Retinopathy. M. D. Davis. The Sight Saving Review. 39(2):97-103; Summer 1969.

Diabetic retinopathy is traced through its various clinical stages and possible treatment techniques are discussed.

80. An Ophthalmologist's View of Diabetic Retinopathy. H. F. Spalter. The Sight Saving Review. 41(4):167-70; Winter 1971-1972.

Clinical problems confronting the ophthalmologist who must cope with the increasingly frequent ocular manifestations of diabetes are discussed. Recent developments in technique and technology are outlined.

81. Peripheral Retinal Ablation in the Treatment of Proliferative Diabetic Retinopathy: A Three Year Interim Report of a Randomized, Controlled Study Using the Argon Laser. B. L. Hercules; I. I. Gayed; S. B. Lucas; J. Jeacock. British Journal of Ophthalmology. 61(9):555-63; September 1977.

A randomized controlled trial is reported of 94 patients with a symmetrical proliferative diabetic retinopathy involving the optic disc. Patients were treated by a peripheral retinal ablation technique using the argon laser. Between treated and untreated eyes, a highly significant difference in mean cumulative deterioration of visual acuity and blindness was shown in all but the late stages of the disease process. The untreated eyes exhibited far worse results. The earlier photocoagulation is initiated in the proliferative process to control or eliminate optic disc neovascularization, the better the visual prognosis. (AA-M)

82. Personal and Professional Reactions to Blindness from Diabetic Retinopathy. J. Oehler-Giarrantana. The New Outlook. 237-9; June 1976.

The author, a blind psychiatric nurse, offers professional counseling to newly blinded individuals and discusses adjustment to blindness from both professional and personal points of view. She considers the major aspects of adjustment to blindness to be grief (over the loss

of vision and also about possible future complications and shortened life expectancy); reevaluation (value change, the development of realistic goals); the independence-dependence conflict; stigma (societal prejudice and ascription to blind persons of stereotyped characteristics); communication without visual cues; and identity integration or the state of self-actualization by which the individual learns to live with the disability. (AA-M)

83. Photocoagulation Reduces Diabetic Blindness Risk. [anon.]. NIH Research Advances 1977. DHEW(NIH) 78-3:61-4; 1978.

Results from a nationwide clinical trial of the use of photocoagulation to reduce diabetic blindness are presented.

84. Photocoagulation Treatment of Proliferative Diabetic Retinopathy: The Second Report of Diabetic Retinopathy Study Findings. Diabetic Retinopathy Study Research Group. Ophthalmology. 82-105; January 1978.

Data from the Diabetic Retinopathy Study show that photocoagulation reduced the rate of development of severe visual loss and inhibited the progression of retinopathy. These beneficial effects were noted to some degree in all those stages of diabetic retinopathy which were included in the study. Some deleterious effects of treatment were also found, including losses of visual acuity and constriction of peripheral visual field. The risk of these harmful effects was considered acceptable in eyes with retinopathy in the moderate or severe proliferative stage when the risk of severe visual loss without treatment was great. In early proliferative or severe nonproliferative retinopathy, when the risk of severe visual loss without treatment was less, the risks of harmful treatment effects assumed greater importance. In these earlier stages, study findings have not led to a clear choice between prompt treatment and deferral of treatment unless and until progression to a more severe stage occurs. (AA-M)

85. POB Programming and Diabetes. I. H. Leopold. The Sight Saving Review. 45(1):31-3; Spring 1975.

The two forms of diabetic retinopathy, proliferative and nonproliferative, are described. Therapeutic approaches to the problem are also mentioned. These include hypophysectomy, photocoagulation, the use of clofibrate against hyperlipemia, and acetylsalicylic acid.

86. Practical Techniques for Instructing the Visually Impaired Diabetic. S. Kolterman. Journal of Visual Impairment and Blindness. 72(9): 368-721; November 1978.

The author discusses some medical complications the visually impaired diabetic may experience, suggests how to prepare for them, and describes some aids and techniques that have proved useful. (AA)

87. Preliminary Report on Effects of Photocoagulation Therapy. The Diabetic Retinopathy Study Research Group. American Journal of Ophthalmology. 81(4):383-96; April 1976.

The clinical importance of diabetic retinopathy and the increasing use of photocoagulation in its management are reported in this preliminary article.

88. Problems and Advances in the Treatment of Diabetic Retinopathy. J. W. McMeel. Sundial. 3(4):1-2; December 1977.

Research conducted by the Eye Research Institute of Retina Foundation on diabetic retinopathy is described. Specific foci include early subtle anatomic and physiologic changes secondary to the primary metabolic defect in blood sugar metabolism.

89. Programs for Blind Diabetic Clients at a Rehabilitation Center. M. S. Williams. The New Outlook. 402-5; November 1975.

A workable diabetic program, developed in response to the individual needs of blind diabetic clients at the Minneapolis Society for the Blind's Rehabilitation Center, is discussed. Among the components of this program are ongoing cooperation with local diabetes groups, the services of a nurse consultant, use of a diabetic profile sheet, development of housing and medical resources and of teaching kits for insulin measurement and urine testing, and specific program accommodations for the diabetic. Emphasis is given to diabetes-related blindness and staff education in the area of diabetes. Accommodation to each diabetic as an individual with unique symptoms, control measures, and needs is seen as critical. (AA-M)

90. Proliferative Diabetic Retinopathy: Treatment with Xenon Arc Photocoagulation. Interim Report of Multicentre Randomized Controlled Trial. British Medical Journal. 1(6063):739-41; 19 March 1977.

One hundred patients with symmetrical proliferative diabetic retinopathy had one eye randomly chosen for treatment with xenon arc

photocoagulation while the other was left untreated as a control. Patients were subdivided into those with new vessels on both optic discs and those with only peripheral new vessels. In patients with new vessels on the optic discs, the vision of the untreated eyes deteriorated more than that of the treated eyes and the difference in deterioration was significant after one, two, and three years. There was no such difference in patients who had only peripheral new vessels. Eighteen patients had become blind in one or both eyes by the last assessment, but only one patient became blind in the treated eye without concomitant blindness in the untreated eye. Thirteen were blind only in the untreated eye. Both photographic and ophthalmoscopic examinations showed that new vessels on the disc regressed more in the treated eyes than in the untreated ones. As some forms of diabetic retinopathy are now treatable, early diagnosis and evaluation are increasingly important. (AA)

91. Rehabilitation Techniques in Severe Disability: Case Studies. J. G. Cull, ed. Springfield, IL: Charles C. Thomas; 1974. 238 p.

A study of a blind diabetic is included among the rehabilitation case studies in this book.

Price: $12.50.

Source: Charles C. Thomas, Pub.; 301-327 East Lawrence Avenue; Springfield, IL 62717. (217) 789-8980.

92. Severe Adolescent-Onset Proliferative Diabetic Retinopathy: The Effect of Pituitary Ablation. J. A. Valone, Jr.; J. W. McMeel. Archives of Ophthalmology. 96(8):1349-53; August 1978.

Proliferative diabetic retinopathy (PDR) is uncommon in patients younger than the age of 20. Since 1969, 14 adolescents with severe PDR have been identified, the youngest of whom was 16 years old and the oldest 19. The shortest duration of diabetes mellitus prior to diagnosis of PDR was eight years. Ten patients had a positive family history of diabetes. Thirteen patients had suboptimal metabolic control, while ten had some degree of azotemia, seven were hypertensive, and six had proteinuria. Ophthalmic findings included advanced and fibrous proliferation on initial classification and rapid progression to blindness, which was most frequently secondary to retinal detachment. In a small retrospective study, pituitary ablation may have offered greater preservation of vision than that observed in untreated patients. (AA-M)

93. Some Plain Talk on Diabetic Retinopathy. S. L. Fine. The Sight Saving Review. 46(1):3-9; Spring 1976.

Nonproliferative and proliferative retinopathy are illustrated and their causes and effects discussed. The relationship between retinopathy and control of diabetes, treatments currently available, and rehabilitation of the blind patient are also included.

94. Transitory Blindness During Ethanol and Phenethylbiguanide Induced Lactic Acidosis in a Subject with Diabetes Mellitus. A Case Report. P. N. Sorensen. Acta Ophthalmologica (Kobenhavn). 55(2):177-82; April 1977.

Transitory blindness is described in a diabetic patient with typical ethanol- and phenethylbiguanide-induced lactic acidosis. Blindness developed in the course of eight hours, but vision returned during treatment with IV bicarbonate, insulin, and glucose. The condition is discussed in relation to a presumed inhibition of the oxidative metabolism in the retina. (AA)

95. Vocational Rehabilitation for the Visually Impaired Diabetic. F. A. Silver. Journal of Visual Impairment and Blindness. 72(9):374-5; November 1978.

The article describes specialized services the visually impaired diabetic requires in addition to the usual vocational rehabilitation services. The diabetic must be trained in self-administration of insulin and in proper hygiene, and the correct diet must be made available. Counselor and rehabilitation center staff must cooperate in handling the diabetic's unstable physical and visual condition and must be prepared to cope daily with new complications and possible emergencies. (AA)

96. What the Health Professional Must Know About the Blind Diabetic. J. Schulz. Journal of Visual Impairment and Blindness. 72(9):376-8; November 1978.

The author believes that anyone in the medical or rehabilitation field wishing to work with the blind diabetic must understand the impact of blindness on diabetic control, the practical skills that enable the blind diabetic to maintain good control, the emotional concomitants of blindness, and the areas where it may be necessary to de-emphasize control because of the person's emotional needs. Self-administration of insulin, urine testing, diet, exercise, and other factors influencing the individual's attitude toward diabetes control are discussed. (AA-M)

97. Chronic Complications of Diabetes [Sound recording]. Madison: University of Wisconsin; [n.d.]. 1 cassette; 40 min. Accompanied by: print materials. (The Health Professional's Role in Diabetes Mellitus; No. 5).

Various complications of diabetes are discussed, including two types of retinopathy, three stages of nephropathy, and five neuropathies. A portion of the program deals with proper foot hygiene for the diabetic. Common foot lesions are categorized and surgical treatments, including amputation, are explained. (UM-M)

Price: $50.00.

Source: Drug Intelligence Publications, Inc.; 1241 Broadway; Hamilton, IL 62341. (217) 847-2504.

98. Chronic Complications of Diabetes Mellitus [Filmstrip]. Tucson: Medical Electronic Educational Services; 1975. 61 fr.; color; 35 mm. Accompanied by: 1 cassette (20 min.), 5 student notebooks, answer key, and instruction guide.

This program examines the chronic complications of diabetes, including the vascular-related complications of large vessel disease, retinopathy, and nephropathy--with appropriate preventive as well as therapeutic measures to be taken. Peripheral neuropathy, amyotrophy, microangiopathy, Kimmelstiel-Wilson disease, and retinopathy with their surgical, medical, and nursing therapies are discussed. (UM-M)

Price: Sale: $70.00 (filmstrip); $100.00 (slide). Order No.: MS-6.

Source: Medical Electronic Educational Services; 1802 West Grant Road, Suite 119; Tucson, AZ 87505. (602) 624-4401.

99. Clinical Applications of Lasers [Videorecording; Motion picture]. L. Goldman, et al. Kalamazoo: Upjohn; 1970. 1 cassette; 19 min.; sd., color; 3/4 in.

The purpose of this videorecording is to demonstrate the clinical application of lasers in dermatology, ophthalmology, and surgery. The program provides a diagrammatic review of how light originates with emphasis on the production of laser light. Laser light--light

amplified by stimulated emission of radiation--is pure light of a previously unattainable power. This intense light energy is absorbed by darker tissue and converted into heat which vaporizes tissue. Use of lasers is demonstrated in three clinical fields: in dermatology to remove a port wine stain, a tattoo, and a melanoma; in ophthalmology to coagulate vascular branches in diabetic retinopathy and repair retinal tears; and in surgery to remove brain tumors in mice and humans. (AVLINE-M)

AVLINE: Audience level: --Allied Health: graduate; continuing education. --Dental: graduate; continuing education. --Medical: undergraduate; general and specialty graduate; continuing education; --Nursing: graduate; continuing education. --Specialty: ophthalmology. Rating: Recommended. Review date: Oct. 1973. Reviewer: Association of American Medical Colleges (AAMC). Learning method: Lecture support.

Price: Loan: free/1-3 days, apply postage.

Source: Upjohn Company; Professional Film Library; 7000 Portage Road; Kalamazoo, MI 49001. (616) 323-6572.

100. Diabetes Mellitus and Its Retinopathy [Sound recording]. P. H. Forsham et al. Glendale, CA: Audio Digest Foundation; 1971. 1 cassette; 60 min. (Ophthalmology; Vol. 9; No. 3).

Side 1 of this tape deals with newer medical aspects of diabetes mellitus. Diabetes is defined and the role of obesity as an insulin antagonist is explored. Treatment of obese diabetics and specific complications in middle-aged, obese diabetics are discussed. The University Group Diabetes Program studies and the "tolbutamide scandal" are summarized. Side 2 comprises a panel discussion on the management of diabetic retinopathy. The use of pituitary ablation for proliferative diabetic retinopathy is covered as well as the treatment of very early retinopathy. Indications for use of photocoagulation therapy are cited. Treatment for glaucoma and diabetic retinopathy in the same patient is also discussed. (UM-M)

Price: Sale: $6.00.

Source: Audio Digest Foundation; 1577 East Chevy Chase Drive; Glendale, CA 91206. (213) 240-7500.

101. Diabetic Retinopathy [Slide]. A. Patz. New York: Medcom; 1971. 105 slides; color; 2 x 2 in. Accompanied by: print materials.

This slide learning system explores the evolution of diabetic retinopathy from both an academic and practical point of view. Cases

treated by photocoagulation, highlights of the retinopathic stages amenable to this therapy, and proper selection of patients are presented. The slides primarily consist of funduscopic photographs and schematic diagrams. The accompanying text provides discussion keyed to each slide. (UM-M)

Price: Sale: $105.00. Order No.: 2027.

Source: Medcom Inc.; 1633 Broadway; New York, NY 10019. (212) 765-6162.

102. Diabetic Retinopathy [Slide-tape]. S. L. Fine. Baltimore: Johns Hopkins; 1976. 11 slides; color; 2 x 2 in. Accompanied by: 1 cassette (22 min.) and booklet. (Highlights of the Topics in Clinical Medicine: Diabetes Mellitus).

Prognostic differences between proliferative and nonproliferative diabetic retinopathy are discussed in this slide-tape presentation. Metabolic control is claimed to be of no proven benefit in retarding the progress of retinopathy; however, recent studies are cited which demonstrate a relationship between good control and protection against the onset of retinopathy. Histopathologic slides illustrate retinal abnormalities. Four aspects of therapy--medical management, pituitary ablation, photocoagulation, and vitrectomy--are presented. The fundamental differences between xenon arc and argon laser photocoagulation are indicated. (UM-M)

Price: Sale: $25.00 for series set.

Source: Johns Hopkins Medical Institution; Office of Continuing Education; Audiovisual Programs; 1721 East Madison Street; Turner Auditorium Building; Baltimore, MD 21205. (301) 955-3988.

103. Diabetic Retinopathy [Videorecording]. G. P. Johnston. Fort Sam Houston, TX: Academy of Health Sciences; 1971. 1 cassette; 49 min.; sd.; color; 3/4 in.

Ophthalmological findings in diabetic retinopathy are described, and treatment by means of xenon and argon laser photocoagulation is discussed. Fundus photographs showing the various stages of this disease are included. The presentation notes that the frequency of retinopathy increases with both age and the number of years a patient has had diabetes. The rapidity of the neovascularization process is demonstrated in serial fundus photographs of several patients. Three stages in diabetic retinopathy are also depicted in fundus photographs. The criteria, use, and complications of photocoagulation by means of xenon and argon lasers are described and illustrated. (AVLINE-M)

AVLINE: Audience level: --Medical: continung education. --Specialty: ophthalmology. Rating: Recommended. Review date: Oct. 1973. Reviewer: Association of American Medical Colleges (AAMC). Learning methods: Lecture support.

Price. Free copies will be made if a blank tape is provided.

Source: Academy of Health Sciences; U.S. Army; AHS-TV Health Sciences Media Division; Fort Sam Houston, TX 78234. (512) 221-2651.

104. Diabetic Retinopathy: Attempts to Hold the Image [Videorecording]. New York: Network for Continuing Medical Education; 1975. 1 cassette; 17 min.; sd.; color; 3/4 in.

The three progressive stages of diabetic retinopathy are shown, with the classic ophthalmoscopic signs of each stage emphasized. Details of the techniques of fluorescein angiography and fluorescein cineangiography are given. Two forms of treatment for diabetic retinopathy--argon laser photocoagulation and vitrectomy--are discussed in detail. Both techniques are clearly demonstrated. A teaching quiz on diabetic retinopathy concludes the program. (UM-M)

Price: Write for complete information.

Source: Network for Continuing Medical Education; 15 Columbus Circle; New York, NY 10023. (212) 541-8088.

105. The Diabetic Retinopathy Study: A Nationwide Clinical Trial [Motion picture]. Bethesda: National Eye Institute; 1975. 13 min.; sd.; color; 16 mm.

The motion picture illustrates the fundamentals of multicenter, controlled clinical trials by portraying the first eight months of a patient's participation in the Diabetic Retinopathy Study, a nationwide, randomized test of photocoagulation treatment. Procedures and safeguards which both protect the rights and welfare of patients and assure objective evaluation of treatment are discussed. This program is highly recommended for ophthalmologists, diabetologists, or others interested in the design and conduct of clinical trials. (AVLINE-M)

AVLINE: Audience level: --Allied health: graduate. --Medical: undergraduate; graduate; continuing education. --Nursing: undergraduate; graduate; continuing education. --Specialty: ophthalmology, internal medicine, biometry, epidemiology. Rating: Highly recommended. Review date: June 1978. Reviewer: Association of American Medical Colleges (AAMC). Learning method: Lecture support.

Price: Loan: Free.

Source: National Institutes of Health; National Eye Institute; Information Office; Building 31, Room 6A25; Bethesda, MD 20205. (301) 496-5248.

106. Diagnosis and Photocoagulation Treatment of Macular Diseases: Argon Laser Photocoagulation [Motion Picture]. A. Patz. Baltimore: Johns Hopkins University; 1973. 10 min.; sd.; color; 16 mm.

This motion picture describes and demonstrates diagnosis and photocoagulation in the treatment of macular diseases. The use of photocoagulation and a review of the results are included. The program also features fluorescein and fundus photographs. (AVLINE-M)

AVLINE: Audience level: --Medical: specialty graduate; specialty continuing education. --Specialty: ophthalmology. Rating: Recommended. Review date: Oct. 1973. Reviewer: Association of American Medical Colleges (AAMC). Learning method: Lecture support.

Price: Loan: $5.00; Sale: $350.00 (16 mm); $150.00 (videotape).

Source: Conrad Berens International Eye Film Library; 246 Danforth Avenue; Jersey City, NJ 07305. (201) 332-6685.

107. Management of Diabetic Retinopathy [Videorecording]. Cincinnati: Video Digest; 1972. 1 cassette; 30 min.; sd.; color; 3/4 in. (Video Digest: Ophthalmology).

Current concepts in the management of diabetic retinopathy are reviewed in this videorecording. Ophthalmic signs, the incidence, prognosis, and therapy of diabetic macular and proliferative retinopathy are considered. Slides, photographs, and diagrams are used. Neovascularization and proliferative changes representative of diabetic retinopathy are described and demonstrated. Methods for managing this condition--medical therapy, retinal coagulation, pituitary ablation, retinovitreal surgery, and experimental insulin replacement--are discussed. Special attention is directed toward the use of retinal photocoagulation by means of the xenon arc and the argon laser. It is recommended that treatment of proliferative diabetic retinopathy be based on an assessment of the degree of vascularity, progression of the disease, visual status, and the overall medical condition of the patient. (AVLINE-M)

AVLINE: Audience level: --Medical: undergraduate; specialty graduate; specialty continuing education. --Specialty: ophthalmology. Rating: Recommended. Review date: Oct. 1973. Reviewer: Association of American Medical Colleges (AAMC). Learning method: Lecture support.

Price: Sale: $125.00.

Source: Profesional Research Inc.; 12960 Coral Tree Place; Los Angeles, CA 90066. (800) 421-8105.

108. Ocular Biomicroscopy [Motion picture]. G. M. Breinin. Jersey City: Medical Film Guild; 1969. 45 min.; sd.; color; 16 mm.

Techniques and interpretation of ocular biomicroscopy, a procedure which permits study of the living histology of the eye, are explored in this motion picture. The six fundamental examination methods, clinical indications, and results of ocular biomicroscopy are outlined. (UM-M)

Price: Loan: $5.00; Sale: $400.00 (16 mm); $150.00 (videocassette).

Source: Conrad Berens International Eye Film Library; 246 Danforth Avenue; Jersey City, NJ 07305. (201) 332-6685.

109. Ocular Fundus in Systemic Diseases [Slide]. D. G. Cogen; D. D. Donaldson. New York: Medcom; 1973. 100 slides; color; 2 x 2 in. Accompanied by: a guide.

The purpose of this slide presentation is to describe and demonstrate the appearance of the fundus as it is affected by various systemic diseases. Funduscopic views from cases of vascular disease (such as hypertension and vasculitis), metabolic diseases (diabetes and hypercholesterolemia), inflammatory diseases (toxoplasmosis and syphilis), lesions of the optic nerve (optic atrophy and papilledema), congenital lesions (hypoplasia and rubella retinopathy), and tumors (metastatic carcinoma and leukemia) are presented. Case histories, treatment, and prognosis are discussed and the pathology is described in detail. (UM-M)

Price: Sale: $105.00. Order No.: 2026.

Source: Medcom Inc.; 1633 Broadway; New York, NY 10019. (212) 765-6162.

110. Ocular Histology and Pathology, Part II: Degeneration, Malignant Melanoma, Retinoblastoma, Diabetes Mellitus Complications and Congenital Anomalies [Slide-tape]. New York: Medcom Products; 1979. 100 slides; color; 2 x 2 in. Accompanied by: 2 cassettes (43.5 min.) and narrative test booklet, slide index, and self-evaluation test.

This slide program correlates pathological specimens with clinical appearance to demonstrate prominent changes occurring in ocular disease. (MP)

Price: Sale: $105.00. Order No.: 2701.

Source: Medcom Inc.; 1633 Broadway; New York, NY 10019. (212) 765-6162.

111. Patient Interview: Diabetic with Cataracts and Prostheses [Videorecording]. Farmington: University of Connecticut; [n.d.]. 1 cassette; 21 min.; sd.; b&w; 3/4 in.

An elderly black woman with both legs amputated recounts her medical history over the past 10 years. She describes her diabetic symptoms and treatment as well as the adjustments she had to make. A nurse conducts the interview, and the attending physician describes the patient's deteriorating thenar eminence, leg prostheses, and recent cataract surgery. (UM-M)

Price: Loan: Free.

Source: University of Connecticut Health Center; Biomedical Communications (BMC); Farmington, CT 06032. (203) 674-2000.

112. A Photographic Classification of Diabetic Retinopathy [Motion picture]. New York: Cooper Laboratories; [n.d.]. 15 min; sd; color; 16 mm.

This motion picture outlines the various stages of diabetic retinopathy and provides a photographic example of each. The proposed classification scheme comprises background retinopathy; exudative retinopathy (three types) and angiopathy (three kinds); and proliferative retinopathy; neovascular retinopathy (six varieties) and glial (fibrous) retinopathy (three kinds). Prognosis and treatment of retinopathy and the operation of the fundus camera are discussed. (UM-M)

Price: Loan: Free. Order No.: ZNS21.

Source: Association Films, Inc.; 600 Grand Avenue; Ridgefield, NJ 07657. (201) 943-8200.

113. Surgical Treatment of Diabetic Retinopathy: A Round Table Discussion [Sound recording]. Glendale, CA: Audio Digest Foundation; 1973. 1 cassette; 60 min. (Ophthalmology; Vol. 11; No. 19).

Problems of living with retinal hemorrhage and possible side effects of photocoagulation treatment for diabetic retinopathy are discussed. The importance of controlled medical management of diabetes is stressed. Other topics include methods of therapy for diabetic retinopathy,

retinopathy in the pregnant diabetic, spontaneous regression of proliferation of diabetic retinopathy, and contraindications to photocoagulation. (UM-M)

Price: Sale: $6.00.

Source: Audio Digest Foundation; 1577 East Chevy Chase Drive; Glendale, CA 91206. (213) 240-7500.

114. Systemic Disease in the Eye [Slide-tape]. P. R. Lichter; L. Graham. Ann Arbor: University of Michigan; 1976. 52 slides; color; 2 x 2 in. Accompanied by: 1 cassette (12 min.) and print materials. (Vision: An Individualized Approach to the Study of Ophthalmology: Media Library; No. 362).

This slide-tape discusses the role of the eye in systemic disease. Ocular manifestations of various forms of arthritis and inflammations, erythema, vitamin A deficiency, diabetes mellitus, and hyperthyroidism are considered. (UM)

Price: Loan: $25.00/week.

Source: University of Michigan; Audiovisual Education Center; 416 Fourth Street; Ann Arbor, MI 48103. (313) 764-5360.

Price: Sale: $75.00 plus $5.00 handling.

Source: University of Michigan; Department of Postgraduate Medicine, Media Library; Towsley Center for Continuing Medical Education; Ann Arbor, MI 48109. (313) 765-2024.

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